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EXAMINER

RYMAN, DANIEL J

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/589,511
Filing Date: June 08, 2000
Appellant(s): AOKI, HIROSHI

Roland E. Long, Jr.
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 9 July 2004.

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(1) *Real Party in Interest*

A statement identifying the real party in interest is contained in the brief.

(2) *Related Appeals and Interferences*

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) *Status of Claims*

The statement of the status of the claims contained in the brief is correct.

(4) *Status of Amendments After Final*

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) *Summary of Invention*

The summary of invention contained in the brief is correct.

(6) *Issues*

The appellant's statement of the issues in the brief is correct.

(7) *Grouping of Claims*

The rejection of claims 1-11 stand or fall together because appellant's brief includes a statement that this grouping of claims stand or fall together. See 37 CFR 1.192(c)(7).

(8) *Claims Appealed*

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) *Prior Art of Record*

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5,774,461 HYDEN et al. 6-1998

6,343,322 NAGAMI et al. 1-2002

(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art in view of Pasternak et al (USPN 5,648,969).
3. Regarding claim 1, Applicant admits as prior art a mobile radio system comprising: a base station control apparatus (Fig. 1; page 1, line 1-page 3, line 14; and page 4, line 6-page 5, line 23); and first through N-th radio base stations, the base station control apparatus for controlling the first through N-th radio base stations each of which is connected to said base station control apparatus, where N represents a positive integer which is greater than one (Fig. 1; page 1, line 1-page 3, line 14; and page 4, line 6-page 5, line 23), said base station control apparatus transmitting first through N-th individual identifiers as first through N-th station identifiers to said first through said N-th radio base stations to allocate said first through said N-th individual identifiers to said first through said N-th radio base stations, respectively, on a start-up sequence of each of said first through said N-th radio base stations (Fig. 1; page 1, line 1-page 3, line 14; and page 4, line 6-page 5, line 23), said base station control apparatus

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transmitting a transmission message signal having an n-th individual identifier as a transmission individual identifier to an n-th radio base station to carry out a link connection between said base station control apparatus and said n-th radio base station, where n is a variable between one and N, both inclusive (Fig. 1; page 1, line 1-page 3, line 14; and page 4, line 6-page 5, line 23), wherein said n-th radio base station stations comprises: first means for comparing said transmission individual identifier with said n-th station identifier to abandon said transmission message signal when said transmission individual identifier is not coincident with said n-th station identifier (Fig. 1; page 1, line 1-page 3, line 14; and page 4, line 6-page 5, line 23).

Applicant does not admit as prior art having the n-th radio base stations comprise second means for making the first means become a reset state when said first means continues to abandon said transmission message signal during a predetermined time duration. Pasternak teaches, in a radio system using ATM connections, having a VCI/VPI table capable of automatic updating that contains a predetermined time duration (time stamp) which is used to time-out connections on which traffic is not received (col. 6, line 35-54). Applicant's prior art teaches manually resetting a connection when no traffic is received on the connection due to transmission errors during set-up (Fig. 1; page 1, line 1-page 3, line 14; and page 4, line 6-page 5, line 23). Pasternak teaches automatically removing a connection when no traffic is received on the connection during a predetermined time duration in order to allow automatic updating in a device. It would have been obvious to one of ordinary skill in the art at the time of the invention to have second means for making the first means become a reset state when said first means continues to abandon said transmission message signal during a predetermined time duration in order to allow a device to automatically reset (update) its connections.

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4. Regarding claim 2, referring to claim 1, Applicant's admitted prior art in view of Pasternak discloses that the base station control apparatus is connected to each of said first through said N-th radio base stations by an ATM fashion (Applicant: Fig. 1; page 1, line 1-page 3, line 14; and page 4, line 6-page 5, line 23 and Pasternak: col. 6, line 35-54).

5. Regarding claim 3, referring to claim 2, Applicant's admitted prior art in view of Pasternak discloses that the transmission individual identifier is transmitted in VPI/VCI of an ATM cell from said base station control apparatus to said n-th radio base station (Applicant: Fig. 1; page 1, line 1-page 3, line 14; and page 4, line 6-page 5, line 23 and Pasternak: col. 6, line 35-54).

6. Regarding claim 4, referring to claim 3, Applicant's admitted prior art in view of Pasternak discloses that the base station control apparatus again carries out said start-up sequence of said n-th radio base station when said second means makes said first means become said reset state in said n-th radio base station (Applicant: Fig. 1; page 1, line 1-page 3, line 14; and page 4, line 6-page 5, line 23 and Pasternak: col. 6, line 35-54).

7. Regarding claim 5, referring to claim 3, Applicant's admitted prior art in view of Pasternak discloses that the first means produces an error to indicate said error when said transmission individual identifier is not coincident with said n-th station identifier (Applicant: Fig. 1; page 1, line 1-page 3, line 14; and page 4, line 6-page 5, line 23).

8. Regarding claim 6, referring to claim 3, Applicant's admitted prior art in view of Pasternak discloses that the first means comprises a VPI/VCI filter for filtering said transmission message signal to obtain said transmission individual identifier from said transmission message signal, said VPI/VCI filter judging whether or not said transmission individual identifier is

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coincident with said n-th station identifier (Applicant: Fig. 1; page 1, line 1-page 3, line 14; and page 4, line 6-page 5, line 23).

9. Regarding claim 7, Applicant admits as prior art a mobile radio system, comprising: a base station control apparatus (Fig. 1; page 1, line 1-page 3, line 14; and page 4, line 6-page 5, line 23); and plural radio base stations connected in an ATM fashion to the base station control apparatus (Fig. 1; page 1, line 1-page 3, line 14; and page 4, line 6-page 5, line 23), the base station control apparatus, at start-up, configured to assign an individual VPI/VCI value to each radio base station (Fig. 1; page 1, line 1-page 3, line 14; and page 4, line 6-page 5, line 23), the base station control apparatus configured to transmit a message signal comprising a transmitted VPI/VCI value as part of the transmitted message signal to a selected base station (Fig. 1; page 1, line 1-page 3, line 14; and page 4, line 6-page 5, line 23), each radio base station comprising a central processing unit and an ATM data reception section for filtering the transmitted message signal based on the transmitted VPI/VCI value so that the selected base station, upon receipt of the transmitted message signal, compares the transmitted VPI/VCI value within the transmitted message signal to the individual VPI/VCI value assigned to the selected base station (Fig. 1; page 1, line 1-page 3, line 14; and page 4, line 6-page 5, line 23), wherein, when the transmitted VPI/VCI value is coincident with the individual VPI/VCI value, the message is accepted and when the transmitted VPI/VCI value is non-coincident with the individual VPI/VCI value, the message is abandoned and an error state is indicated by the central processing unit (Fig. 1; page 1, line 1-page 3, line 14; and page 4, line 6-page 5, line 23). Applicant does not admit as prior art having, after the error state continues for a predetermined time duration, the central processing unit reset the ATM data reception section to place the individual VPI/VCI value to a no-set

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condition. Pasternak teaches, in a radio system using ATM connections, having a VCI/VPI table capable of automatic updating that contains a predetermined time duration (time stamp) which is used to time-out connections on which traffic is not received (col. 6, line 35-54). Applicant's prior art teaches manually placing a connection in a no-set condition when traffic is not received on the connection due to transmission errors during set-up (Fig. 1; page 1, line 1-page 3, line 14; and page 4, line 6-page 5, line 23). Pasternak teaches automatically removing a connection when no traffic is received on the connection during a predetermined time duration in order to allow automatic updating in a device. It would have been obvious to one of ordinary skill in the art at the time of the invention to have, after the error state continues for a predetermined time duration, the central processing unit reset the ATM data reception section to place the individual VPI/VCI value to a no-set condition in order to allow a device to automatically reset (update) its connections.

10. Regarding claim 8, referring to claim 7, Applicant's admitted prior art in view of Pasternak discloses that after the error state continues for a predetermined time duration and the central processing unit resets the ATM data reception section to place the individual VPI/VCI value to a no-set condition, the base station control apparatus transmits an allocation signal with the individual VPI/VCI value to the selected radio base station (Applicant: Fig. 1; page 1, line 1-page 3, line 14; and page 4, line 6-page 5, line 23 and Pasternak: col. 6, line 35-54).

11. Regarding claim 9, Applicant admits as prior art a mobile radio system, comprising: a base station control system and plural radio base stations (Fig. 1; page 1, line 1-page 3, line 14; and page 4, line 6-page 5, line 23), the base station including means for assigning individual station identifiers to each radio base station (Fig. 1; page 1, line 1-page 3, line 14; and page 4,

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line 6-page 5, line 23), and means for transmitting a message comprising a transmitted VPI/VCI value to a selected radio base station (Fig. 1; page 1, line 1-page 3, line 14; and page 4, line 6-page 5, line 23), the selected radio base station comprising means for comparing the individual station identifier assigned to the selected radio base station with the transmitted VPI/VCI value (Fig. 1; page 1, line 1-page 3, line 14; and page 4, line 6-page 5, line 23), wherein, when the assigned individual station identifier coincides with the transmitted VPI/VCI value, the message is accepted (Fig. 1; page 1, line 1-page 3, line 14; and page 4, line 6-page 5, line 23) and when the assigned individual station identifier is different from the transmitted VPI/VCI value, the message is abandoned and an error state is initiated (Fig. 1; page 1, line 1-page 3, line 14; and page 4, line 6-page 5, line 23). Applicant does not admit as prior art having the selected base station further comprise means for resetting the individual VPI/VCI value at the selected radio base station to a no-set condition, upon the error state continuing past a predetermined time duration. Pasternak teaches, in a radio system using ATM connections, having a VCI/VPI table capable of automatic updating that contains a predetermined time duration (time stamp) which is used to time-out connections on which traffic is not received (col. 6, line 35-54). Applicant's prior art teaches manually placing a connection in a no-set condition when traffic is not received on the connection due to transmission errors during set-up (Fig. 1; page 1, line 1-page 3, line 14; and page 4, line 6-page 5, line 23). Pasternak teaches automatically removing a connection when no traffic is received on the connection during a predetermined time duration in order to allow automatic updating in a device. It would have been obvious to one of ordinary skill in the art at the time of the invention to have the selected base station further comprise means for resetting the individual VPI/VCI value at the selected radio base station to a no-set condition, upon the

error state continuing past a predetermined time duration in order to allow a device to automatically reset (update) its connections.

12. Regarding claim 10, referring to claim 9, Applicant's admitted prior art in view of Pasternak discloses that the plural radio base stations are connected to the base station control apparatus in an ATM fashion, the base station control apparatus, at start-up, transmits the individual VPI/VCI value to each radio base station, each radio base station comprises a central processing unit connected to an ATM data reception section, when the message is abandoned the error state is initiated by the central processing unit, and the central processing unit provides the reset of the individual VPI/VCI value, upon the error state continuing past the predetermined time duration, to place the individual VPI/VCI value to the no-set condition (Applicant: Fig. 1; page 1, line 1-page 3, line 14; and page 4, line 6-page 5, line 23 and Pasternak: col. 6, line 35-54).

13. Regarding claim 11, referring to claim 10, Applicant's admitted prior art in view of Pasternak discloses that upon the error state continues past the predetermined time duration and the central processing unit resets the ATM data reception section to place the individual VPI/VCI value to a no-set condition, the base station control apparatus is triggered to transmit an allocation signal with the individual VPI/VCI value to the selected radio base station to change the no-set condition to the individual VPI/VCI value (Applicant: Fig. 1; page 1, line 1-page 3, line 14; and page 4, line 6-page 5, line 23 and Pasternak: col. 6, line 35-54).

(11) Response to Argument

For clarification purposes, Examiner will begin by summarizing the rejection of the independent claims. Examiner asserts that the disclosed prior art teaches each limitation of the

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independent claims except the following limitation, or variations thereof: "after the error state continues for a predetermined time duration, the central processing unit resets the ATM data reception section to place the individual VPI/VCI value to a no-set condition" (claim 7).

However, Examiner further asserts that the disclosed prior art teaches a manual reset means (as broadly defined, a central processing unit) for resetting the individual VPI/VCI value at the selected radio base station to a no-set condition, upon the error state continuing for a time duration (time between the indication of an error condition and the manual reset of the base station) (Fig. 1; page 1, line 1-page 3, line 14; and page 4, line 6-page 5, line 23). Examiner recognizes that the disclosed prior art does not teach that the time duration is a *predetermined* time duration since the manual reset can occur at any time after the indication of an error condition. Examiner maintains that Pasternak teaches using a predetermined time duration (col. 6, lines 40-44: expiration time for time stamp) to automatically reset a connection (erase expired connection: col. 6, lines 47-49). Thus, it is Examiner's position that it would have been obvious to one of ordinary skill in the art at the time of the invention to have the reset means of the disclosed prior art utilize a predetermined time duration in order to perform the reset automatically.

On page 7, lines 14-16, of the Appeal Brief, Applicant states, "In the Final Rejection...the Examiner acknowledges that the Reset Means is not part of the Disclosed Prior Art". This is incorrect. Examiner acknowledges that the disclosed prior art contains reset means by stating in the Final Rejection, "Applicant's prior art teaches manually placing a connection in a no-set condition when traffic is not received on the connection due to transmission errors during set-up" (page 7, lines 7-10). However, the Examiner also acknowledges that the disclosed

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prior art does not contain reset means “for resetting the individual VPI/VCI value at the selected radio base station to a no-set condition, upon the error state continuing past a *predetermined* time duration” (page 7, lines 2-5, emphasis added). In short, it is the Examiner’s position that, while the disclosed prior art teaches a reset means utilizing a time duration, the disclosed prior art does not teach a reset means that utilizes a *predetermined* time duration.

On page 7, line 17-page 8, line 2, of the Appeal Brief, Applicant asserts that “Examiner relies on PASERNAK...as the basis for concluding that the Reset Means is obvious”. Again, this is incorrect. The disclosed prior art already teaches using reset means. Therefore, Examiner does not rely on Pasternak to teach this limitation. Instead, Examiner relies on Pasternak to teach that it is obvious to have the reset means of the disclosed prior art utilize a predetermined time duration, as outlined above.

On page 8, lines 11-22, of the Appeal Brief, Appellant asserts that “there is no motivation to modify the radio base stations” since Pasternak suggests “a Figure 10 table” within the base station control apparatus. Examiner, respectfully, disagrees. Examiner notes that the disclosed prior art teaches a reset means, utilizing a time duration (time between the indication of an error condition and the manual reset of the base station), located in the base stations themselves. What the disclosed prior art does not teach, and what Examiner relies on Pasternak to disclose, is using a *predetermined* time duration in a reset means. Therefore, since the disclosed prior art already teaches the reset means, for proper motivation, Pasternak only needs to teach why a reset means would utilize a predetermined time duration as its time duration. This is precisely what Pasternak teaches. Pasternak performs automatic updating (col. 6, lines 35-36) by erasing an identifier (reset connection) (col. 6, lines 47-49) for an expired connection (col. 6, lines 40-44) where the

expiration time of a connection is the “predetermined time”. Thus, Pasternak teaches using a predetermined time duration in order to automatically perform a reset function. As such, Examiner maintains that Pasternak provides motivation to modify the radio base stations of Applicant’s disclosed prior art to use a predetermined time duration in order to automatically perform a reset function.

On page 8, line 23-page 9, line 13, of the Appeal Brief, Appellant argues Pasternak “does not teach using the time-out to reset an individual base station, and further does not place the base station in a ‘no-set condition’”. Examiner agrees. Examiner relies on the disclosed prior art teaching of a manual reset means to teach using a time-out (time between the indication of an error condition and the manual reset of the base station) to reset an individual base station (page 4, line 6-page 5, line 23, esp. page 5, lines 20-23), and to place the base station in a “no-set condition” (page 4, line 6-page 5, line 23, esp. page 5, lines 20-23) where the “no-set condition” is interpreted to mean that the wrong identification for the base station is reset through deletion of the identifier such that the base station can acquire a new identifier. Therefore, Pasternak is not required to teach the use of a time-out to reset an individual base station or to teach the placement of a base station in a “no-set condition”.

For reiteration, Examiner asserts that disclosed prior art teaches a reset means utilizing a time duration (time between the indication of an error condition and the manual reset of the base station) based on an error condition and an elapsed time from the error condition, where the reset means is located in each of the base stations (Fig. 1; page 1, line 1-page 3, line 14; and page 4, line 6-page 5, line 23). Examiner further asserts that what the disclosed prior art does not disclose, and what Examiner relies on Pasternak to teach, is using a *predetermined* time duration

in a reset means. Therefore, given Pasternak's teachings concerning the use of a predetermined time duration in order to automatically perform a reset (col. 6, lines 40-44), Examiner maintains that Applicant's disclosed prior art in view of Pasternak teaches each limitation of the claims, as outlined in the Final Rejection.

On page 9, line 14-page 11, line 6 of the Response, Applicant argues that "the factual settings of the present invention and PASTERNAK are different". Specifically, Applicant argues that in the disclosed prior art "a message repeatedly resent without acceptance is what necessitates the manual reset of the base station". In contrast, Applicant asserts that in Pasternak's system "the resending of the message would keep the connection from being reset as the inactivity time-out condition is not met" since the activity monitoring is performed on the "transmission side", such that "there is a time-out when traffic is **not being sent**" (page 9, line 25-page 9, line 19). Examiner, respectfully, disagrees.

Pasternak uses the table of Figure 10 (VCI/VPI table) in a node which receives an input bitstream, sorts the input bitstream, and transmits the sorted cells to another node (Fig. 8; col. 6, lines 57-63; and col. 7, lines 10-11). Step 80c in Fig. 8 of Pasternak teaches that the VCI/VPI table (table of Figure 10) operates on the received input bitstream (ref. 80a) rather than on the transmitted bitstream (ref. 80j). Thus, Pasternak contradicts Applicant's assertion that the time-out occurs when traffic is not being sent. Rather, Pasternak discloses that the time-out occurs when traffic is not *received* on a connection (e.g. when a cell is not read on a connection such that the connection is not encountered) (col. 6, lines 40-44). As such, contrary to Applicant's assertion, the resending of a message in the disclosed prior art would not keep the connection from being reset in Pasternak, where the resent message and the connection contain different

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identifiers (condition in the disclosed prior art resulting in the error condition). This is because the inactivity time-out condition of Pasternak is based on the reception of a signal rather than on the transmission of a signal. Therefore, the different "factual settings" asserted by Applicant are based on an incorrect understanding of Pasternak. Since Pasternak's time-out is based on received messages, Examiner maintains that the combination of Applicant's admitted prior art and Pasternak is proper.

In conclusion, Applicant discloses as prior art each limitation of the independent claims except the following limitation, or variations thereof: "after the error state continues for a predetermined time duration, the central processing unit resets the ATM data reception section to place the individual VPI/VCI value to a no-set condition" (claim 7). However, Applicant also teaches as prior art using a manual reset means (as broadly defined, a central processing unit) for resetting the individual VPI/VCI value at the selected radio base station to a no-set condition, upon the error state continuing for a time duration (time between the indication of an error condition and the manual reset of the base station). Thus, the only thing that Applicant does not teach as prior art is using a *predetermined* time duration for the time duration. Pasternak teaches using a predetermined time duration in order to automatically reset a connection. Thus, Examiner maintains that it would have been obvious to one of ordinary skill in the art at the time of the invention to have the reset means of the disclosed prior art utilize a predetermined time duration in order to perform the reset automatically.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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August 23, 2004

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